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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,495	04/16/2004	Kazuo Urata	51270-309265	1341

7590 05/18/2007
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EXAMINER

MAGEE, CHRISTOPHER R

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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05/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,495

Applicant(s)

URATA ET AL.

Examiner

Christopher R. Magee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

- Claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Mayumi (JP 2001-110175).

- Regarding claim 11, Mayumi discloses an optical disk drive comprising:

a plurality of convex stripes [section 0016] formed on inner surfaces of side walls of a structural member defining a space for accommodating an optical disk, the convex stripes extending along a horizontal direction, protruding into the space and rectifying an air flow generated during disk rotation [Figures 2 and 3].

- Regarding claim 12, Mayumi discloses an optical disk drive comprising:

a plurality of concave stripes [section 16] formed on inner surfaces of side walls of a structural member defining a space for accommodating an optical disk, the concave stripes extending along a horizontal direction, retarded from the space, and rectifying an air flow generated during disk rotation [Figures 2 and 3].

Allowable Subject Matter

2. Claims 1-10 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 specifies an optical disk drive, which requires:

“a repetitive structure formed on edge portions of the plate member and extending along the direction crossing the disk tracks, the repetitive structure creating space having a high resistance to air flow and space having a low resistance to air flow, and rectifying the air flow generated during disk rotation above the upper disk surface to suppress turbulence and enhance laminar flow.”

Claim 10 specifies an optical disk drive, which requires:

“a repetitive structure formed on opposite end portions of the opening and extending along the direction crossing disk tracks, the repetitive structure creating space having a high resistance to air flow and space having a low resistance to air flow, and rectifying the air flow generated during disk rotation above the upper disk surface to suppress turbulence and enhance laminar flow and having a wave shape as viewed in plan.”

The closest prior art of record, Mayumi, fails to teach, show or suggest, by either anticipating or rendering obvious, the invention as set forth in the claims of the instant application. Furthermore, a search made does not detect the combined claimed elements as set forth in the pending claims. Additionally, the reasons for allowance of the claims over the prior art of record is believed to be readily clear, self evident and apparent from the claim language set forth in each of claims 1 and 10, when compared and contrasted with the prior art.

More particularly, the instant invention (as set forth in claims 1 and 10) provides for an optical disk drive having a repetitive structure formed on edge portions of the plate member and extending along the direction crossing the disk tracks, the repetitive structure creating space having a high resistance to air flow and space having a low resistance to air flow, and rectifying

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the air flow generated during disk rotation above the upper disk surface to suppress turbulence and enhance laminar flow and having a wave shape. None of the cited prior art of record disclose such a repetitive structure, as set forth in the manner, function and relationship relative to other claimed structures as prescribed by the independent claims.

Therefore, these features, in combination with other features of claims 1 and 10, are not anticipated by, nor made obvious over, the closest prior art of record of Mayumi.

Response to Arguments

3. Applicant's arguments filed 02/21/2007 have been fully considered but they are not persuasive.

The applicant asserts on page 8:

"The Mayumi reference does not disclose teach, or suggest the optical disk drive specified in independent claim 11. Unlike the optical disk drive specified in claim 11, Mayumi does not disclose "a plurality of convex stripes formed on inner surfaces of side walls of a structural member defining a space for accommodating an optical disk, the convex stripes extending along a horizontal direction, protruding into the space and rectifying an air flow generated during disk rotation." In particular, the optical disk drive recited in claim 11 is distinct from the disclosure of Mayumi because Mayumi discloses that the recesses 22 are formed only in the lower surface of the ceiling plate 1B or in a sound absorbing sheet 26, which is attached to the ceiling plate. The sidewalls of the drawer 2 are completely void of recesses. Accordingly, Applicants respectfully submit that independent claim 11 distinguishes over the Mayumi reference. Independent claim 12 recites limitation similar to those in independent claim 11. Accordingly, Applicants respectfully submit that independent claim 12 distinguishes over the Mayumi reference for reasons similar to those set forth above with respect to independent claim 11."

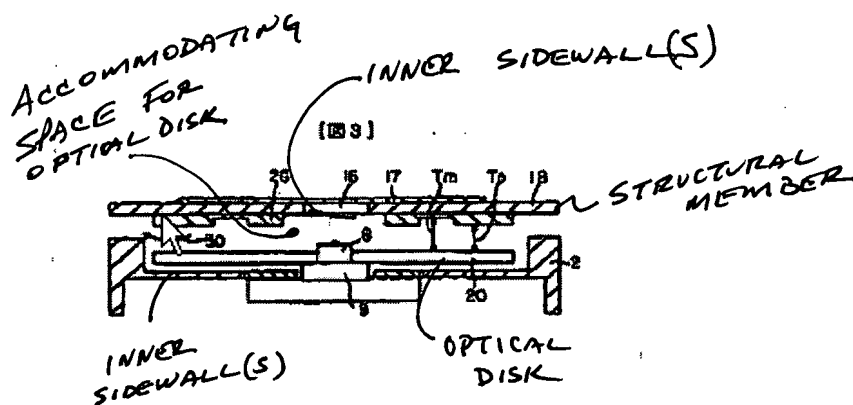
Regarding claim 11, the Examiner maintains that Mayumi teaches a plurality of convex stripes [section 0016] formed on inner surfaces of side walls of a structural member defining a space for accommodating an optical disk, the convex stripes extending along a horizontal

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direction, protruding into the space and rectifying an air flow generated during disk rotation [Figures 2 and 3].

Regarding claim 12, the Examiner further maintains Mayumi teaches a plurality of concave stripes [section 16] formed on inner surfaces of side walls of a structural member defining a space for accommodating an optical disk, the concave stripes extending along a horizontal direction, retarded from the space, and rectifying an air flow generated during disk rotation [Figures 2 and 3].

Both the plurality of convex and concave stripes of Mayumi are formed on inner surfaces of sidewalls of a structural member defining a space for accommodating an optical disk (see annotated figure 3).



Therefore, the rejection of claims 11 and 12 is upheld.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (571) 272-7592. The examiner can normally be reached on M-F, 8: 00 am-4: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


ANGEL CASTRO
PRIMARY EXAMINER
Christopher R. Magee
Patent Examiner
Art Unit 2627May 13, 2007
crm